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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/698,887	10/31/2003	David W. Braun	IN-5700	2696

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Patent Department
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WYANDOTTE, MI 48192

EXAMINER

MCCLENDON, SANZA L

ART UNIT	PAPER NUMBER
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1711

NOTIFICATION DATE	DELIVERY MODE
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06/13/2007

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/698,887	BRAUN ET AL.	
	Examiner	Art Unit	
	Sanza L. McClendon	1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 13-23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☒ Claim(s) 8-12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>3/04, 2/05</u> . | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Election/Restrictions

1. Claims 13-23 are hereby withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention of Group II, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on April 3, 2007. Applicant's election without traverse of the mixture of octyl-decyl monoacrylate and pentaerythritol pentaacrylate in the reply filed on April 3, 2007 is acknowledged. However the election is incomplete because applicant has fails to select/choose a compound B component. Thus, the examiner deems, in the interest of compact prosecution, the election portion (i.e., election of compound A and compound B) of the election/restriction requirement, mailed 2/7/07, is withdrawn.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-3 and 5 are rejected under 35 U.S.C. 102(b) as anticipated by Burns et al (6,506,823 and 2002/0132885).

Burns et al teaches nitrocellulose based protective coatings (top coats). Said compositions comprise 3 to about 25% of nitrocellulose, from about 10 to about 50% of a reactive diluent whose

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homopolymers has a Tg less than about 25 °C, from about 25 to about 75% of a reactive diluent whose homopolymers is greater than about 25 °C, and 5 to about 40% of an acrylated urethane. The composition additionally comprises a photoinitiator and conventional additive. Said initiator is used in amounts from 0.5 to about 5% and said additives are found in amounts from up to about 2% by weight. Said reactive diluents whose homopolymer has a Tg less than about 25 °C can be found on page 2 and include octyl acrylate, decyl acrylate and mixtures of octyl/decyl acrylate—see [0022]. The reactive diluent whose homopolymer has a Tg of greater than 25 °C can be found on page 3 and include dipentaerythritol pentaacrylate. It appears that these teachings anticipate claims 1-3. Burns et al teaches the photoinitiators can be used in combination and in example 1 uses a photoinitiator mixture of Irgacure 369 and Darocure 1173. Thus claim 5 is anticipated.

4. Claims 1-3 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Diener et al (5,932,282).

Diener et al sets forth a clear lacquer coating composition useful in repairing vehicles. Said clear lacquer comprises a composition comprising a binder vehicles hardenable by exposure to radiation, a reactive thinners, photoinitiators, and additives, such as rheology influencing agents, thickeners, wetting agents, light stabilizers, solvents and the like. Said reactive thinners can be found in column 3, lines 40-60, wherein at least some of those instant claimed (claim 2) can be found. Reactive thinners are used in amounts from 1-50% by weight. Said photoinitiators can be found in column 4 and used in the composition in amounts from 0.5 to 3% by weight. Diener et al disclose that said photoinitiators can be used in mixtures, thus claim 5 is anticipated. The binder vehicles can be found in column 3. It is deemed that at least some of those found in instant claim 3 can be found. It can be seen from the examples the weight percentages of the components are within the instantly claimed weight percents ranges. The organic solvents can be found in column 4, lines 55 to the end.

5. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Lahrmann et al (5,425,970).

Lahrmann et al teaches multi-coat lacquers comprising two clear coat layers and a pigment layer. The 1st clear coat layer is obtained from a heat curable composition, while the 2nd is obtained from a radiation curable composition. Said radiation curable composition comprises a free radically polymerizable composition comprising prepolymer/oligomers, reactive diluents, photoinitiators, a customary lacquer additives, such as light stabilizers, transparent pigments, solvents, and others as found in column 7. Said prepolymers/oligomers include methacrylic functional methacrylate polymers, epoxy acrylates, polyester acrylates, polyether acrylates, polyurethane acrylates, silicone acrylates, amine acrylates, melamine acrylates, unsaturated polyesters and unsaturated polyurethanes—see column 5. At least some of these anticipate applicant's claim 3. The reactive diluents can be found in

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column 5, lines 25-40 and include at least some of the instantly claimed compounds of claim 2. The diluents are used in amounts from 1 to 70--wt%. The photoinitiators can also be found in column 5, wherein these are disclosed as being used in combination in amounts from 0.5 to 5--wt%. Thus claim 5 is anticipated. The solvents can be found in column 6, lines 25-30 and column 7, lines 12-17. The weight percents found in claim 4 appear to be encompassed within examples 1-4 of the reference.

Claim Rejections - 35 USC § 102/35 USC § 103

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-3 and 5-7 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Diener et al (5,932,282).

Diener et al sets forth a clear lacquer coating composition useful in repairing vehicles. Said clear lacquer comprises a composition comprising a binder vehicles hardenable by exposure to radiation, a reactive thinners, photoinitiators, and additives, such as rheology influencing agents, thickeners, wetting agents, light stabilizers, solvents and the like. Said reactive thinners can be found in column 3, lines 40-60, wherein at least some of those instant claimed (claim 2) can found. Reactive thinners are used in amounts from 1-50% by weight. Said photoinitiators can be found in column 4 and used in the composition in amounts from 0.5 to 3% by weight. Diener et al disclose that said photoinitiators can be used in mixtures, thus claim 5 is anticipated. The binder vehicles can be found in column 3. It is deemed that at least some of those found in instant claim 3 can be found. It can be seen from the examples the

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weight percentages of the components are within the instantly claimed weight percents ranges. The organic solvents can be found in column 4, lines 55 to the end.

While Diener et al does teach curing by exposure to radiation, Diener et al does not expressly teach irradiance levels as instantly claimed. Diener et al does disclose the exposure time is within the range of a few seconds, ranging from 4 to 160 seconds. It is also disclosed the entire process, such as base coat/clear coat structure drying time including the pre-drying the base coat takes from 5 to 10 minutes. The examiner deems that since applicant has not established the criticality of using the claimed irradiance levels and there being no structural difference between the cured coating of Diener et al and the cured coating of the claims that it would have been obvious to use any irradiance level to cure the instantly claimed composition in the absence of evidence to the contrary and/or unexpected results.

Allowable Subject Matter

9. Claims 8-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. The following is a statement of reasons for the indication of allowable subject matter: The prior art fails to teach curing compositions such as instantly claimed or similar compositions with the UV sources providing radiation as found in instant claims 8-12.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. 2005/0100685 to Flosbach et al teaches primer coating for vehicles using UVA: UVB in a 1:1 ratio. 2003/0059555 and 6,838,177 to Fenn et al both teach primer compositions for vehicles curable by UV radiation having a UVA: UVB ratio of 1:1. 5,231,524 to De Keyzer et al teaches acrylic resin clear-coats comprising monomeric acrylic esters and photoinitiators. 6,677,045 to Meisnenburg et al discloses clear topcoat comprising a similar coating composition. 5,532,286 to Burns et al teaches the octyl/decyl acrylates are used in acrylic compositions to decrease the brittleness in the cured coatings—see examples. 5,486,384 to Bastian et al teaches similar compositions. 6,991,833 to Krohn et al teaches similar compositions.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sanza L. McClendon whose telephone number is (571) 272-1074. The examiner can normally be reached on Monday through Friday 7:30-4:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Sanza L. McClendon

Examiner

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SMc